

AMENDMENT UNDER 37 C.F.R. § 1.111  
Application Serial No. 09/880,047  
Attorney Docket No. Q64973

**REMARKS**

Upon entry of the present Amendment, claims 1-21 are all the claims pending in the application. Claims 1, 3-4, 6, 8-10, 12, 14, 17, and 19-20 are amended and claim 21 is added. No new matter is presented.

Dealing with preliminary matters first, Applicant thanks the Examiner for indicating acceptance of Replacement Figures 5, 6A, 6B, 6C, and 7, which were submitted on March 16, 2005. However, Applicant notes that the Examiner has not indicated acceptance of Figures 1-4, which were formally submitted on August 22, 2001. Thus, the Examiner is requested to indicate acceptance of Figures 1-4 in the next action.

To summarize the Office Action, claim 18 is objected to as being in improper form; claim 14 is rejected under 35 U.S.C. § 112, second paragraph; claims 1-5, 7-9, 11-13 15, 16, 19 and 20 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kung et al. (U.S. Patent No. 6,775,267, hereinafter “Kung”); claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kung in view of Cave et al. (U.S. Patent No. 6,404,746, hereinafter “Cave”); and claims 10, 17 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kung in view of Tsuchiya et al. (U.S. Patent No. 6,118,784, hereinafter “Tsuchiya”). The outstanding objection and rejections are addressed as follows.

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### **Claim Objections**

The Examiner objects to claim 18 as being in proper independent form because a multiple independent claim cannot depend from another multiple independent claim. In response, Applicant notes that claim 18 is not in multiple dependent form. Rather, claim 18 depends from claim 17. Thus, while claim 17 depends from claim 12, 15 or 16, the dependency of claim 18 is not improper. Indeed, claim 17 is the only pending claim which is recited in multiple dependent format. Therefore, the objection to claim 18 is improper and the Examiner is requested to withdraw this objection and consider claim 18 on its merits.

### **Claim Rejections - 35 U.S.C. § 112, second paragraph**

As noted above, claim 14 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicant submits that this ground of rejection is moot in view of the amendment of claim 14. Accordingly, withdrawal of this rejection is requested.

### **Claim Rejections - 35 U.S.C. § 102**

Claims 1-5, 7-9, 11-13, 15, 16, 19 and 20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kung. This ground of rejection is traversed.

### ***Independent claim 1***

Claim 1 defines a novel network system presenting new features. For instance, an IP packet according to a service requested by a terminal is sent to one of a plurality of service providers through a plurality of IP networks that each utilize a different network layer protocol

and the service is supplied to the terminal through the utilization of an IP packet transmitted from the service provider to the plurality of IP networks. Further, the network system of claim 1 comprises a packet exchange, provided between the plurality of IP networks, that converts a format of an IP packet to be sent via the plurality of IP networks from a first network layer protocol to a second network layer protocol different from the first network layer protocol so as to match the format of an IP network that is a send destination of the IP packet to be sent. In addition, connection between the user terminal and the plurality of service providers is unified in the network system of claim 1. Thus, redundancy in equipment which would be necessary for each of a plurality of service providers operating according to different network layer protocols may be eliminated.

Notwithstanding the Examiner's rejection, Applicant submits that Kung fails to teach or suggest all the features of claim 1. For instance, Kung teaches a system for broadband multimedia access which provides a least cost routing for a communication in accordance with a user's selection of data rate and quality of service. *See Kung* at col. 3, lines 60-64. As shown in Figure 1, a broadband residential gateway 300 is connected to a plurality of networks via a gateway at IP network 120. *See Kung* at col. 5, lines 44 - col. 6, line 23. However, Kung merely teaches data conversion in the physical layer and or transport layer, such as IP-ATM/Frame Relay and IP to PTSN conversion. *See Kung* at col. 37, lines 5-15. However, Kung does not suggest any conversion in the network layer, as required by claim 1. Stated differently, the only conversion contemplated by Kung occurs in Layers 1 and 2 (i.e., the physical layer and transport

layer) of the OSI reference model, while the network system according to claim 1 provides conversion of a format of an IP packet to be sent via the plurality of IP networks from a first network layer protocol to a second network layer protocol different from the first network layer protocol so as to match the format of an IP network that is a send destination of the IP packet to be sent. In an exemplary embodiment, an IP packet may be converted to the MPLS network layer protocol or the IP within IP network layer protocol. Since the only conversion suggested by Kung occurs in the physical layer or transport layer, Kung does not teach or suggest a conversion of a network layer protocol (i.e., a conversion in Layer 3 of the OSI reference model).

Therefore, Kung fails to teach or suggest at least this feature, and therefore does not anticipate all the limitations of claim 1. Accordingly, reconsideration and withdrawal of the rejection of claim 1 is requested. Further, claims 2-7 and 21 are believed to be allowable at least by virtue of depending from claim 1.

*Independent claim 8*

Claim 8 defines a network system comprising, *inter alia*, a packet exchange connected to the IP network, the packet exchange converting packet data of the user terminal from a first network layer protocol to a second network layer protocol of a destination network within the plurality of networks, and converting packet data from a source network within the networks from the second network layer protocol to the first network layer protocol of the user terminal, wherein the first network layer protocol and the second network layer protocol are different.

Applicant submits that *at least* this feature is not taught or suggest by Kung, for the

reasons discussed above with respect to claim 1. Accordingly, reconsideration and withdrawal of the rejection of claim 8 is requested. In addition, claims 9-11 are believed to be allowable at least by virtue of depending from claim 8 and allowance of claims 9-11 is therefore requested.

*Independent claim 12*

For similar reasons, claim 12 is believed to be allowable at least by virtue of reciting the feature of a packet exchange connected to the IP network, the packet exchange converting packet data of the user terminal from a first network layer protocol to a second network layer protocol of a destination network, and converting packet data from a source network from the second network layer protocol to the first network layer protocol of the user terminal, wherein the first network layer protocol and the second network layer protocol are different. As discussed above, Kung fails to teach or suggest *at least* this feature.

Accordingly, reconsideration and withdrawal of the rejection of claim 12 is requested. Further, claims 13-18 are believed to be allowable at least by virtue of depending from claim 12 and allowance of claims 13-18 is therefore requested.

*Independent claim 19*

The packet data transmission method of claim 19 recites the feature of converting the packet data from a network layer protocol utilized by a service provider or online entrepreneur that transmits the packet data to a network layer protocol utilized by the user terminal, and

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sending the converted packet data to the user terminal. As discussed above, Kung fails to teach any conversion of a network layer protocol.

Thus, Kung fails to teach or suggest *at least* this feature and therefore fails to anticipate all the claim limitations. Accordingly, reconsideration and withdrawal of the rejection of claim 19 is requested. Further, claim 20 is believed to be allowable at least by virtue of depending from claim 19, and allowance of claim 19 is therefore requested.

### **Claim Rejections - 35 U.S.C. § 103**

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kung in view of Cave. Without commenting substantively on this ground of rejection, Applicant submits that claim 6 is allowable at least by virtue of depending from claim 1.

Claims 10, 17 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kung in view of Tsuchiya. Without commenting substantively on this ground of rejection, Applicant submits that claims 10, 17 and 20 are allowable at least by virtue of depending from claims 8, 12, and 19, respectively.

### **Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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